

MATERIAL SAFETY DATA SHEET

IODINE TINCTURE
CAROLINA BIOLOGICAL

Revised: 05/15/08
Replaces: 12/05/07
Printed: 05/20/08

1. PRODUCT DESCRIPTION

Product Name: Iodine Tincture
Product Code(s): 86-9121, 86-9123, 84-0520, 84-1137, 95-7500,
95-7495A
Size: 30 ml, 60 ml, 100 ml, 500 ml
Chemical Name: Product is a mixture
CAS Number: See section 2
Formula: See section 2
Synonyms: None known
Distributor: Carolina Biological Supply Company
2700 York Road
Burlington, NC 27215
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principal Hazardous Components:
Ethanol (CAS#64-17-5) 45-55%
Iodine (CAS#7553-56-2) 2%
Sodium Iodide (CAS#7681-82-5) 2.4%
Methyl isobutyl ketone(denaturant) (CAS#108-10-1) 0 to 4%
Other Components: Water (CAS#7732-18-5) Balance
TLV and PEL units: Ethanol ACGIH TLV:1000 ppm
OSHA PEL: 1000ppm
Iodine ACGIH TLV: 0.1 ppm ceiling
OSHA PEL: 0.1ppm (TWA) ceiling
Methyl isobutyl ketone
ACGIH TLV: 50 ppm TWA; 75 ppm STEL
OSHA PEL: 100 ppm TWA

3. HAZARD IDENTIFICATION

Emergency Overview:
Potential Health Effects:
Eyes: May cause irritation.
Skin: May cause irritation.
Ingestion: May cause gastrointestinal discomfort.
Inhalation: May cause irritation to respiratory tract.

4. FIRST AID MEASURES

Emergency and First Aid Procedures:
Eyes - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.
Skin - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.
Ingestion - If swallowed, if conscious, give plenty of water. Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.
Inhalation - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm and quiet, and get medical attention.

5. FIREFIGHTING PROCEDURES

Flash Point(Method Used): 13C (ethanol)
NFPA Rating: None established

MATERIAL SAFETY DATA SHEET

IODINE TINCTURE
CAROLINA BIOLOGICAL

Revised: 05/15/08
Replaces: 12/05/07
Printed: 05/20/08

Extinguisher Media:

Use dry chemical, CO2 or appropriate foam.

Flammable Limits in Air % by Volume: 3.3-19 (ethanol)

Autoignition Temperature: 363C (ethanol)

Special Firefighting Procedures:

Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Flammable. Vapors are heavier than air and may travel distances to an ignition source and flash back.

6. SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled:

Ventilate area of spill. Eliminate all sources of ignition.

Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

7. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling or Storing: Store away from heat, sparks, and open flame in a tightly closed container.

Other Precautions: Do not ingest

8. SPECIAL PROTECTION INFORMATION

Respiratory Protection(Specify Type):

A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Yes

Mechanical(General): No

Special: No

Other: No

Protective Gloves:

Rubber, neoprene, PVC, or equivalent.

Eye Protection:

Splash proof chemical safety goggles should be worn at all times.

Other Protective Clothing or Equipment:

Lab apron, eye wash, and safety shower.

9. PHYSICAL DATA

Molecular Weight: Product is a mixture

Melting Point: No information available

Boiling Point: No information available

Vapor Pressure: No information available

Vapor Density(Air=1): 1.59 (ethanol)

Specific Gravity(H2O=1): No information available

Percent Volatile by Volume: 95%

Evaporation Rate(H2O=1): Greater than 1

Solubility in Water: Completely

Appearance and Odor: Dark brown liquid with fruity odor

10. REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Heat, sparks, open flame

Incompatibility(Materials to Avoid): Oxidizers

Hazardous Decomposition Products: Thermal decomposition may produce carbon dioxide and/or carbon monoxide.

MATERIAL SAFETY DATA SHEET

IODINE TINCTURE
CAROLINA BIOLOGICAL

Revised: 05/15/08
Replaces: 12/05/07
Printed: 05/20/08

Hazardous Polymerization: Will not occur

11. TOXICITY DATA

Toxicity Data: Ethanol orl-rat LD50: 7060mg/kg
Methyl Isobutyl Ketone orl-rat LD50: 2080mg/kg
Iodine orl-rat LD50: 14g/kg
Sodium Iodide orl-rat LD50: 4340mg/kg

Effects of Overexposure:

Acute: See section 3. Breathing vapors may cause drowsiness.
May cause respiratory problems, headache, nausea, diarrhea.

Chronic: Ethyl alcohol: Mutation data cited. Not listed as
causing cancer by IARC, NTP, or OSHA

Methyl isobutyl ketone: No information available

Sodium iodide: Tests on laboratory animals indicate material may
produce adverse reproductive effects. Not listed as
causing cancer by NTP, IARC or OSHA.

Iodine: Mutation and reproductive data cited. Not listed as
causing cancer by NTP, IARC or OSHA.

Conditions Aggravated by Overexposure: May cause irritation to eyes,
skin, and respiratory tract.

Target Organs: Respiratory

Primary Route(s) of Entry: Ingestion

12. ECOLOGICAL DATA

EPA Waste Numbers: D002 U161

13. DISPOSAL INFORMATION

Waste Disposal Methods: Dispose in accordance with all applicable
Federal, State and Local regulations.

Always contact a permitted waste disposer (TSD) to assure compliance.

14. TRANSPORT INFORMATION

Description: Flammable liquids, n.o.s. (ethanol, methyl isobutyl
ketone), 3, UN1993, II

May be eligible for shipment domestically by ground as ORM-D.

15. REGULATORY INFORMATION

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

Product or Components	SARA EHS Sec. 302 TPQ	SARA Sec. 313 Chemicals		CERCLA Sec. 103 RQ lbs.	RCRA Sec. 261.33
		Name List	Chemical Category		
Ethanol	No	No	No	No	No
Iodine	No	No	No	No	No
Sodium Iodide	No	No	No	No	No
Methyl Isobutyl Ketone	No	Yes	No	5000	Yes

16. ADDITIONAL INFORMATION

The information provided in this Material Safety Data Sheet represents a
compilation of data drawn directly from various sources available to us.
Carolina Biological Supply makes no representation or guarantee as to
the suitability of this information to a particular application of the

MATERIAL SAFETY DATA SHEET

IODINE TINCTURE
CAROLINA BIOLOGICAL

Revised: 05/15/08
Replaces: 12/05/07
Printed: 05/20/08

substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH.....American Conference of Governmental Industrial Hygienists
CAS Number..Chemical Abstracts Service Number
CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act
DOT.....U.S. Department of Transportation
IARC.....International Agency of Research on Cancer
mppcf.....million particles per cubic foot
N/A.....Not Available
NTP.....National Toxicology Program
OSHA.....Occupational Safety and Health Administration
PEL.....Permissible Exposure Limit
ppm.....parts per million
RCRA.....Resource Conservation and Recovery Act
SARA.....Superfund Amendments and Reauthorization Act
TLV.....Threshold Limit Value
TSCA.....Toxic Substances Control Act